

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1004589

Luminaire Tested: S125DR-B375DB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004589
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DR-B375DB2750-4F0-XX-W2A-D_3500K
Description: Define 5 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

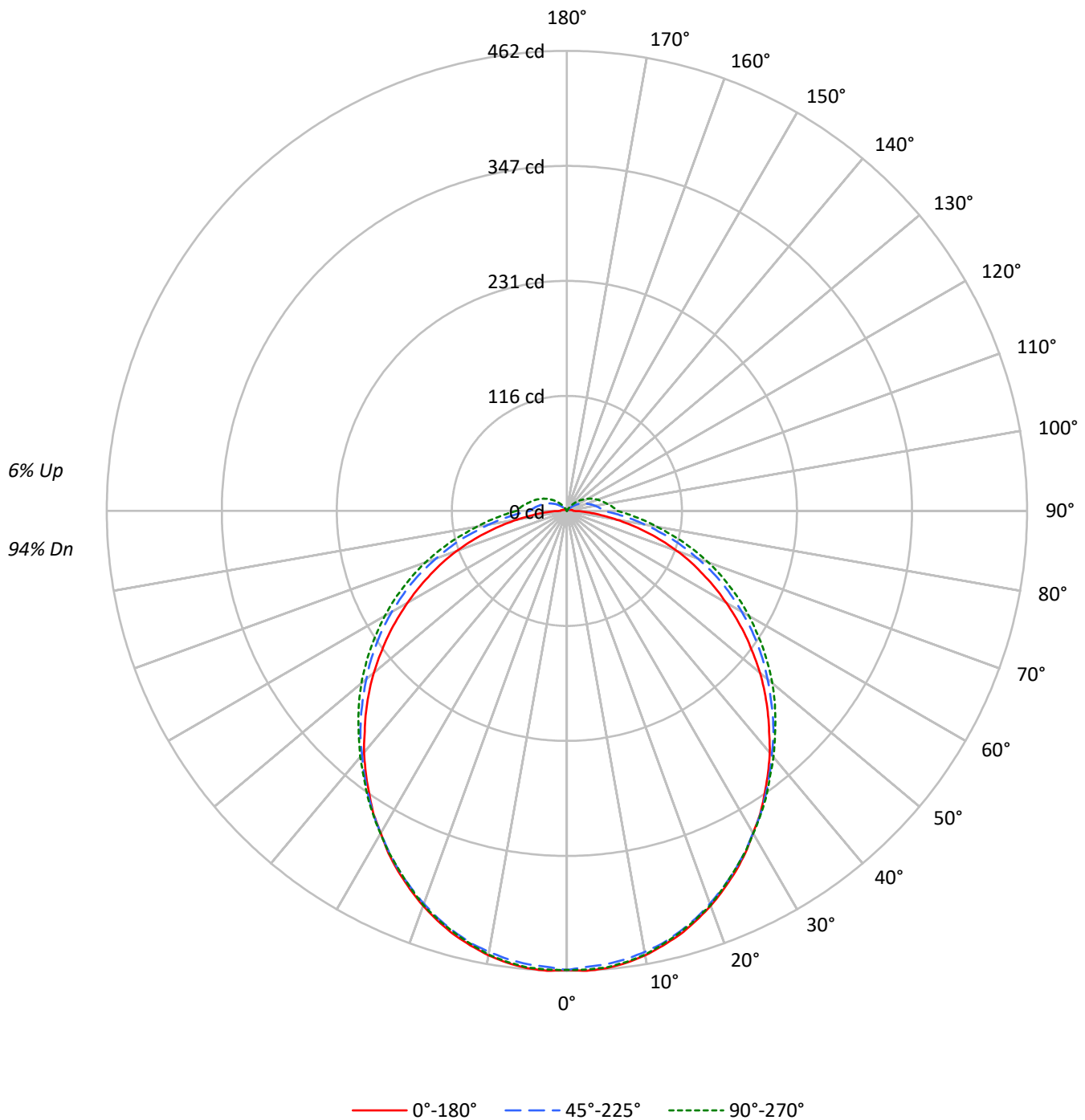
Lumens per Lamp: N/A
Luminaire Lumens: 1428.0 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 13
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	96	94
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	79	79	79	76
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	65	65	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	55	55	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	47	47	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	41	41	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	36	36	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	32	32	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	29	29	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	26	26	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	23	23	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2954	2954	2954
5°	2965	2939	2959
10°	2949	2926	2943
15°	2920	2902	2908
20°	2878	2862	2872
25°	2828	2818	2815
30°	2765	2765	2768
35°	2708	2722	2732
40°	2650	2676	2699
45°	2584	2649	2682
50°	2523	2621	2685
55°	2449	2609	2685
60°	2368	2600	2705
65°	2288	2611	2741
70°	2201	2615	2827
75°	2060	2708	2988
80°	1885	2952	3383
85°	1830	4087	5080

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 8696 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.6	3.1
10°-20°	123.8	8.7
20°-30°	184.1	12.9
30°-40°	218.1	15.3
40°-50°	225.5	15.8
50°-60°	207.7	14.5
60°-70°	167.9	11.8
70°-80°	112.3	7.9
80°-90°	58.1	4.1
90°-100°	32.7	2.3
100°-110°	24.1	1.7
110°-120°	16.1	1.1
120°-130°	9.1	0.6
130°-140°	4.0	0.3
140°-150°	0.8	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	351.6	24.6
0°-40°	569.7	39.9
0°-60°	1002.8	70.2
0°-90°	1341.1	93.9
90°-120°	73.0	5.1
90°-150°	86.9	6.1
90°-180°	87.0	6.1
0°-180°	1428.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	461	461	461	461	461	
5°	461	460	457	460	460	44
15°	440	441	438	440	438	124
25°	400	401	399	400	398	184
35°	346	349	348	349	349	217
45°	285	290	292	296	296	220
55°	219	226	234	239	240	196
65°	151	161	172	179	181	150
75°	83	95	109	118	121	88
85°	25	40	56	66	69	26
90°	7	22	37	48	51	5
95°	6	18	33	43	46	5
105°	4	11	25	34	37	4
115°	3	6	18	26	28	3
125°	2	1	10	18	20	2
135°	1	0	4	10	12	1
145°	0	0	0	2	4	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	461.0	461.0	461.0	461.0	461.0
2.5°	462.3	461.4	458.3	461.4	461.0
5°	461.0	460.1	456.9	460.5	460.1
7.5°	457.8	457.4	454.2	457.4	456.9
10°	453.3	453.3	449.7	452.8	452.4
12.5°	447.0	447.4	444.7	447.0	445.6
15°	440.2	440.6	437.5	440.2	438.4
17.5°	431.6	432.5	429.3	431.6	430.2
20°	422.1	423.0	419.8	421.2	421.2
22.5°	411.3	413.1	409.4	411.3	409.9
25°	400.0	401.3	398.6	400.4	398.2
27.5°	387.8	389.6	386.4	387.8	386.9
30°	373.7	376.5	373.7	374.6	374.2
32.5°	361.1	363.4	361.5	362.4	362.0
35°	346.2	349.3	348.0	349.3	349.3
37.5°	331.7	334.4	334.0	335.8	335.3
40°	316.8	320.4	320.0	321.8	322.7
42.5°	300.5	305.5	306.9	309.1	309.1
45°	285.2	290.1	292.4	295.6	296.0
47.5°	269.4	273.9	277.5	282.0	282.9
50°	253.1	258.1	263.0	268.0	269.4
52.5°	235.9	242.2	248.6	254.0	254.9
55°	219.2	226.4	233.6	238.6	240.4
57.5°	202.0	210.6	218.7	224.2	225.5
60°	184.8	193.9	202.9	209.7	211.1
62.5°	168.1	177.2	187.1	194.8	196.6
65°	150.9	161.3	172.2	179.0	180.8
67.5°	135.1	145.1	155.9	164.1	166.3
70°	117.5	127.9	139.6	148.2	150.9
72.5°	100.3	111.2	124.3	133.8	135.6
75°	83.2	94.9	109.4	118.4	120.7
77.5°	66.4	80.0	93.5	103.5	105.3
80°	51.1	64.6	80.0	89.9	91.7
82.5°	37.1	51.5	67.3	76.8	80.4
85°	24.9	39.8	55.6	65.5	69.1
87.5°	15.8	30.3	45.6	56.0	59.2
90°	7.2	21.7	37.1	47.5	50.6
92.5°	6.3	19.4	35.3	45.2	48.4
95°	5.9	17.6	33.0	42.9	46.1
97.5°	5.4	16.3	31.2	40.7	43.8
100°	5.0	14.5	28.9	38.4	41.1
102.5°	4.5	13.1	27.1	36.2	38.9
105°	4.1	11.3	24.9	33.9	37.1
107.5°	3.6	9.9	23.0	32.1	34.8
110°	3.2	8.6	21.2	29.8	33.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.2	7.2	19.4	27.6	30.7
115°	2.7	5.9	17.6	25.8	28.5
117.5°	2.3	4.5	15.8	23.5	26.7
120°	2.3	3.6	14.0	21.7	24.4
122.5°	1.8	2.3	12.2	19.4	22.1
125°	1.8	1.4	10.4	17.6	19.9
127.5°	1.4	0.9	8.6	15.4	18.1
130°	1.4	0.9	7.2	13.6	15.8
132.5°	0.9	0.9	5.4	11.8	13.6
135°	0.9	0.5	3.6	9.5	11.8
137.5°	0.9	0.5	2.3	7.7	9.5
140°	0.5	0.5	0.9	5.9	7.7
142.5°	0.5	0.0	0.0	4.1	5.9
145°	0.5	0.0	0.0	2.3	4.1
147.5°	0.0	0.0	0.0	0.9	1.8
150°	0.0	0.0	0.0	0.0	0.5
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)